

**ASHRAE TC 4.5
Fenestration
U-Factor Subcommittee Meeting
Minutes**

Monday, January 27, 2003 – Chicago

Chair: Anil Parekh
Secretary: Mike Collins

Attendees	Robert Busby	Kalwall Corp.
	Mike Collins	University of Waterloo
	Brian Crooks	Cardinal
	D. Charlie Curcija	University of Massachusetts
	William C. DuPont	LBNL
	Hakim Elmahdy	IRC / National Research Council Canada
	Howdy Goudey	LBNL
	John Hogan	City of Seattle
	Joe Klems	LBNL
	Peter Lyons	Australian Window Association
	Anil Parekh	Natural Resources Canada
	Richard Tvoyer	Architectural Testing Inc.

Action Items

Research Projects

- 1236-WS – Charlie to complete revisions to the work statement and submit it.
- A01 – Steve Harrison, Charlie and Ross McCluney will write the work statement for the project.
- B95HR – Charlie will provide work statement to the u-factor committee for a review.
- F95 – Charlie, Darius, Willie and Anil will prepare RTAR and work statement. Charlie will send a copy of draft RTAR to others.

HOF u-factor tables

- Table 4 and Table 16 needs to be revised for the upcoming 2005 HOF. Main TC will determine the course of actions based on Anil's discussions with Steve Carpenter.

Meeting began at 2:15 PM with self-introductions.

Minutes

At Honolulu ASHRAE meeting in June 2002, U-Factor Subcommittee meeting was not held due to lack of quorum.

Status of U-factor Research Projects

- *1236-WS: Heat Transfer through Roll-up Doors, Revolving Doors and Opaque Non-residential Swinging Doors*

Charlie will incorporate editing changes to the work statement and submit for RAC considerations.

John Hogan has contacted NFRC for potential involvement in the project.

Project will go out for bidding depending on availability of funds (RAC decision).

- *A01: Thermal and Optical Properties of Cylindrical Skylights*
There is no work statement. As Steve Harrison of Queens University developed the RTAR, committee felt that he should lead the development of the work statement. Charlie and Ross McCluney will be other two authors for this work statement.
- *B95HR: Develop Reliable Computer Simulation Methodology for Local Convective Heat Transfer in Glazing of Vertical and Tilted Fenestration Systems*
There was some discussion as to how this research is different from research conducted at University of Waterloo by John Wright and ElSherbiny. Charlie Curcija clarified that the proposed research deals with local heat transfer coefficients for vertical and tilted cavities. It is not the average heat transfer coefficients. This research is required for accurately predicting condensation resistance.
Charlie is going to provide a copy of this work statement for committee's review.
- *F95: Develop Convective Heat Transfer Coefficients for Indoor and Outdoor Surfaces of Fenestration Systems*
There is no RTAR. Hakim requested to be replaced from the project committee. Anil replaced Hakim. Dariush, Charlie, Willie and Anil will prepare RTAR and work statement. Charlie will send a copy of draft RTAR to others.

HOF Issues

Willie emphasized the need for changes required for u-factor table in HOF (Table 4 in the new version). There was some discussion on how to handle these modifications. Due to short deadline for 2005 HOF, it was agreed that the existing table should be modified based on size adjustments and based on average factors using the new NFRC calculation procedure.

John Hogan also suggested considering updates to Table 4 for addition or deletion of some items. It was felt that due to the amount of work involved (simulation of a number of products), for the 2005 HOF, a revised u-factors for existing factors should be sufficient at this time. For 2009 HOF, a research project should be initiated to revise this table.

There is also need to revise Table 16 (glass blocks and other items) with new NFRC procedures.

At this time, Anil will discuss this issue with Steve Carpenter and suggest appropriate course of action. Anil will report at the main TC meeting.

New Projects

None.

Other Business

None.

Meeting was adjourned at 3:15 PM.